

CLAIMS

- 1 1. A system for detecting a neurological injury in a subject, said
2 system comprising:
3 a computing device comprising:
4 at least one signal emitter attachable to a first position on the
5 subject to emit an electrical signal generated by the computing device into the
6 subject such that the electrical signal is communicated to a nerve in proximity
7 to the first position;
8 at least one signal detector attachable to the second position on
9 the subject to detect the electrical signal transmitted by the nerve;
10 a processor for comparing a threshold reference value with the
11 detected electrical signal and indicating neurological injury when the detected
12 electrical signal is beyond a preselected range of the reference value; and
13 a display providing indication of neurological injury.
- 1 2. The system of claim 1 further comprising a biochemical
2 analyzer sampling a biological fluid obtained from the subject for the presence
3 of chemical species or concentrations indicative of neurological injury.
- 1 3. The system of claim 1 wherein the database is comprised of
2 signal strengths for various positions and muscle groups of the subject.
- 1 4. The system of claim 1 wherein the computing device provides a
2 user with instruction for positioning the at least one emitter and the at least one
3 detector on the subject.
- 1 5. The system of claim 1 further comprising a wireless transmitter
2 coupled to the computing device.
- 1 6. The system of claim 1 further comprising a user interface for
2 data input to the computing device.

1 7. The system of claim 1 further comprising an ancillary
2 monitoring device providing the computing device with an input relating to a
3 physiological parameter of the subject.

1 8. The system of claim 2 wherein the computing device provides
2 suggested pharmaceutical treatment protocols for the subject.

1 9. The system of claim 1 in combination with a kit of
2 neurologically active pharmaceuticals and at least one device for introducing a
3 pharmaceutical into the subject.

1 10. A process for detecting a neurological injury in a subject
2 comprising:
3 attaching an emitter at a first position and a detector at a second
4 position to the subject;
5 emitting an electrical signal from a computing device into the subject at
6 the first position via the emitter;
7 detecting the electrical signal transmitted by a nerve at the second
8 position with the detector;
9 comparing the detected electrical signal with a threshold reference
10 value in the computing device;
11 indicating a neurological injury when the detected electrical signal is
12 beyond a preselected range of the reference value.

1 11. The process of claim 10 further comprising sampling a
2 biological fluid obtained from the subject for the presence of chemical species
3 or concentrations indicative of neurological injury.

1 12. The process of claim 10 further comprising providing
2 suggestions to a user for selecting a pharmaceutical for treating the
3 neurological injury.

1 13. The process of claim 10 further comprising communicating at
2 least one of the detected electrical signal or indicated neurological injury to a
3 remote location.